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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,723	02/27/2001	Helen Biddiscombe	4661300006	3720
35161	7590	11/10/2004	EXAMINER	
DICKINSON WRIGHT PLLC 1901 L. STREET NW SUITE 800 WASHINGTON, DC 20036			BRUENJES, CHRISTOPHER P	
			ART UNIT	PAPER NUMBER
			1772	

DATE MAILED: 11/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/763,723

Applicant(s)

BIDDISCOMBE, HELEN

Examiner

Christopher P Bruenjes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-5,8,9,12,13,15-17 and 20-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-5,8,9,12,13,15-17 and 20-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 28, 2004 has been entered.

WITHDRAWN REJECTIONS

2. The 35 U.S.C. 102 rejections of claims 2-5, 8, 9, 12, 13, 15-17, and 20 as anticipated by Leatherman et al of record in the Office Action mailed December 29, 2003, Pages 5-6 Paragraph 7, have been withdrawn due to Applicant's amendments in the Paper filed September 28, 2004.

3. The objection to the specification and the 35 U.S.C. 112 rejections of record in the Office Action mailed June 24, 2004, Pages 4-6 Paragraphs 7-9, have been withdrawn due to Applicant's amendments in the Paper filed September 28, 2004.

NEW REJECTIONS

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 28 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The limitation that the void-creating filler is "non-siliceous" is new subject matter not described in the specification. Although the specification does provide embodiments in which the void-creating filler is not siliceous, the specification does not provide a description of the void-creating filler sufficient to reasonably convey to one skilled in the relevant art that the void-creating filler cannot be

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siliceous. The mere absence of a positive recitation is not basis for an exclusion. See MPEP 2173.05(i).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 21-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Leatherman et al (USPN 4,892,779).

Leatherman et al anticipate a multilayer article, such as an in-mold label for labeling of polyolefin containers such as high density polyethylene containers (col.14, 1.19-35). The label is formed from a biaxially oriented polypropylene based film formed from at least one layer of polypropylene, which is a polyolefin (col.13, 1.4-7 or col.1, 1.20-35). The biaxially oriented films have shrinkage of greater than 6% in both machine direction and the transverse direction (Table V, col.19). The multilayer article comprises at least one layer of microporous material and at least one layer of nonporous material (col.13, 1.45-51). The nonporous material is formed from polypropylene

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as shown above, which is a polyolefin and heat sealable. The microporous material is formed from ultrahigh molecular weight polypropylene with void creating filler (col.1, 1.20-35). In addition to the siliceous filler other filler including organic polymers, which are non-siliceous are employed to form voids (col.3, 1.52-64). Note claims 21 and 28 are written in open claim language and therefore the scope of the claims include not only the filler explicitly claimed but other fillers as well, such as the siliceous filler taught in Leatherman et al. The microporous material is taught to be at least in the multilayered article as at least one layer. In the embodiment in which the microporous material is in more than one layer, the microporous material is the base layer and an intermediate layer, while the nonporous material is at least an outer layer. The microporous material layers further comprise organic extraction liquids including 1,2-dichloroethane, 1,1,1-trichloroethane or 1,1,2-trichloroethane (col.7, 1.50-56). Saturated hydrocarbons such as chloroethanes are structurally equivalent to hydrocarbons that are fully hydrogenated because they do not contain any higher bonds than a single bond. Therefore, Leatherman et al anticipates a base layer and intermediate layer containing a hydrogenated hydrocarbon resin.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
6. Claims 2-5, 8, 9, 12, 13, 15-17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leatherman et al (USPN 4,892,779).

Leatherman et al teach a multilayer article, such as an in-mold label for labeling of polyolefin containers such as high density polyethylene containers (col.14, 1.19-35). The label is formed from a biaxially oriented polypropylene based film formed

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from at least one layer of polypropylene, which is a polyolefin (col.13, 1.4-7 or col.1, 1.20-35). The biaxially oriented films have shrinkage of greater than 6% in both machine direction and the transverse direction (Table V, col.19). The multilayer article comprises at least one layer of microporous material and at least one layer of nonporous material (col.13, 1.45-51). The nonporous material is formed from polypropylene as shown above, which is a polyolefin and heat sealable. The microporous material is formed from ultrahigh molecular weight polypropylene with void containing filler (col.1, 1.20-35). The microporous material is taught to be at least in the multilayered article as at least one layer. In the embodiment in which the microporous material is in more than one layer, the microporous material is the base layer and an intermediate layer, while the nonporous material is at least an outer layer. The microporous material layers further comprise organic extraction liquids including 1,2-dichloroethane, 1,1,1-trichloroethane or 1,1,2-trichloroethane (col.7, 1.50-56). Saturated hydrocarbons such as chloroethanes are structurally equivalent to hydrocarbons that are fully hydrogenated because they do not contain any higher bonds than a single bond. Therefore, Leatherman et al anticipates a base layer and intermediate layer containing a hydrogenated hydrocarbon resin.

Leatherman et al fail to teach the film having a density of 0.8 g/cm³ or more. However, the density of the substantially non-porous material would inherently have a density of 0.9g/cm³ and the microporous material would inherently have a density less than 0.9g/cm³ when polypropylene is used as the base material. Therefore, the overall density of the film would be determined based on the thickness and quantity of microporous and non-porous layers used in forming the film. Leatherman et al teach that more than one layer of either the non-porous or the microporous are used and the thickness of each layer is not explicitly defined (col.13, 1.37-51). One of ordinary skill in the art would have recognized that the thickness and number of each type of layer used to form an in-mold labeling film would be chosen based on the intended end use of the film as taught by Leatherman et al.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the applicant's invention was made to select the thickness and number of each type of layer used to form the in-mold labeling film of Leatherman et al depending on the intended end results desired of the film, as taught by Leatherman et al. It would have also been obvious to one having ordinary skill in the art at the time the applicant's invention was made that the overall density of the film is

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dependent on the percentage of microporous material used in forming the film and if more non-porous material is used than microporous material then the film would have a density of 0.8g/cm^3 or more.

ANSWERS TO APPLICANT'S ARGUMENTS

7. Applicant's arguments regarding the 35 U.S.C. 102 rejections of claims 2-5, 8-9, 12-13, 15-17, and 20 as anticipated by Leatherman et al have been considered but they are moot since the rejections have been withdrawn. However, the arguments are answered below with regard to how they relate to the new rejection over Leatherman et al under 35 U.S.C. 103.

In response to Applicant's argument that Leatherman et al teaches away from the film having shrinkage of at least 4% in both the machine and transverse directions. Although Leatherman et al does teach that the film can be annealed to limit the shrinkage of the film, Leatherman et al teaches that this step is optional and would not have to be preformed. Furthermore, even if the film is annealed, Leatherman et al merely states that the shrinkage would be a small fraction of the maximum stretch ratio and depending on the maximum, a small portion could still be greater than 4% since 4% is a small fraction. Finally, Leatherman explicitly teaches embodiments in which the

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film has heat shrinkage in the machine and transverse directions that are greater than 6% in Table V in Figure 19.

In response to Applicant's argument that Leatherman et al fails to teach a film having a density of 0.8g/cm^3 or more, see the 35 U.S.C. 103 rejections above with regards to Leatherman et al. Furthermore, the claims as presented do not limit the film to being completely non-porous. The claims set an overall density that requires that the majority of the film be formed of non-porous material in order to meet the density requirement. The claims do not require that the entire film is formed of non-porous materials.

In response to Applicant's argument that Leatherman et al fail to explicitly teach that the container is formed of polyethylene and the label is polypropylene. Leatherman teaches that the microporous material is useful for fusion bonding to polyolefins such as polyethylene and polypropylene (col.14, 1.19-20), and that the microporous material is useful in in-mold labeling of polyolefin containers (col.14, 1.25-35). Therefore, Leatherman et al implicitly teaches that the labeled container is formed of polyethylene or polypropylene. Leatherman et al further teaches that the microporous material is formed of polypropylene and Leatherman et al does not teach that polypropylene microporous materials can only be applied to

polypropylene containers. Therefore, Leatherman et al implicitly teaches that any of the microporous materials are used to form labels on the polyethylene and/or polypropylene containers.

8. Applicant's arguments regarding the 35 U.S.C. 112 rejections and the objection to the specification have been considered but they are moot since the rejections have been withdrawn.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P Bruenjes whose telephone number is 571-272-1489. The examiner can normally be reached on Monday thru Friday from 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications, may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher P Bruenjes
Examiner
Art Unit 1772

CPB

November 8, 2004


HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

11/8/04